

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.

09831843\_CLS  
Most Frequently Occurring Classifications of Patents Returned  
From A Search of 09831843 on November 12, 2004

Original Classifications

10	704/207
6	704/222
4	704/220
3	704/208
3	704/219
3	704/223
2	704/205
2	704/206
2	704/214
2	704/227
2	704/230
2	704/265

Cross-Reference Classifications

15	704/219
9	704/221
9	704/222
8	704/220
4	704/208
4	704/211
4	704/223
4	704/230
3	704/201
3	704/205
3	704/214
2	704/200.1
2	704/203
2	704/207
2	704/209
2	704/224
2	704/225
2	704/226
2	704/264
2	704/265

Combined Classifications

18	704/219
15	704/222
12	704/207
12	704/220
9	704/221
7	704/208
7	704/223

09831843\_CLS

6 704/230  
5 704/205  
5 704/214  
4 704/211  
4 704/265  
3 704/200.1  
3 704/201  
3 704/206  
3 704/224  
3 704/225  
2 704/203  
2 704/209  
2 704/213  
2 704/226  
2 704/227  
2 704/233  
2 704/264

09831843\_CLSTITLES

Titles of Most Frequently Occurring Classifications of Patents Returned

From A Search of 09831843 on November 12, 2004

- 18 704/219 (3 OR, 15 XR)  
 Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,  
 LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO
- COMPRESSION/DECOMPRESSION  
 704/200 SPEECH SIGNAL PROCESSING  
 704/201 .For storage or transmission  
 704/219 ..Linear prediction
- 15 704/222 (6 OR, 9 XR)  
 Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,  
 LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO
- COMPRESSION/DECOMPRESSION  
 704/200 SPEECH SIGNAL PROCESSING  
 704/201 .For storage or transmission  
 704/221 ..Pattern matching vocoders  
 704/222 ...Vector quantization
- 12 704/207 (10 OR, 2 XR)  
 Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,  
 LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO
- COMPRESSION/DECOMPRESSION  
 704/200 SPEECH SIGNAL PROCESSING  
 704/201 .For storage or transmission  
 704/205 ..Frequency  
 704/206 ...Specialized information  
 704/207 ....Pitch
- 12 704/220 (4 OR, 8 XR)  
 Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,  
 LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO
- COMPRESSION/DECOMPRESSION  
 704/200 SPEECH SIGNAL PROCESSING  
 704/201 .For storage or transmission  
 704/220 ..Analysis by synthesis
- 9 704/221 (0 OR, 9 XR)  
 Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,  
 LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

09831843\_CLSTITLES  
 COMPRESSION/DECOMPRESSION  
 704/200 SPEECH SIGNAL PROCESSING  
 704/201 .For storage or transmission  
 704/221 ..Pattern matching vocoders

7 704/208 (3 OR, 4 XR)  
 Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,  
 LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

COMPRESSION/DECOMPRESSION  
 704/200 SPEECH SIGNAL PROCESSING  
 704/201 .For storage or transmission  
 704/205 ..Frequency  
 704/206 ...Specialized information  
 704/207 ....Pitch  
 704/208 .....Voiced or unvoiced

7 704/223 (3 OR, 4 XR)  
 Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,  
 LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

COMPRESSION/DECOMPRESSION  
 704/200 SPEECH SIGNAL PROCESSING  
 704/201 .For storage or transmission  
 704/221 ..Pattern matching vocoders  
 704/223 ...Excitation patterns

6 704/230 (2 OR, 4 XR)  
 Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,  
 LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

COMPRESSION/DECOMPRESSION  
 704/200 SPEECH SIGNAL PROCESSING  
 704/201 .For storage or transmission  
 704/230 ..Quantization

5 704/205 (2 OR, 3 XR)  
 Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,  
 LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

COMPRESSION/DECOMPRESSION  
 704/200 SPEECH SIGNAL PROCESSING  
 704/201 .For storage or transmission  
 704/205 ..Frequency

5 704/214 (2 OR, 3 XR)  
 Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,  
 LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

09831843\_CLSTITLES

- COMPRESSION/DECOMPRESSION  
704/200 SPEECH SIGNAL PROCESSING  
704/201 .For storage or transmission  
704/211 ..Time  
704/214 ...Voiced or unvoiced
- 4 704/211 (0 OR, 4 XR)  
Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,  
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO
- COMPRESSION/DECOMPRESSION  
704/200 SPEECH SIGNAL PROCESSING  
704/201 .For storage or transmission  
704/211 ..Time
- 4 704/265 (2 OR, 2 XR)  
Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,  
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO
- COMPRESSION/DECOMPRESSION  
704/200 SPEECH SIGNAL PROCESSING  
704/258 .Synthesis  
704/265 ..Interpolation
- 3 704/200.1 (1 OR, 2 XR)  
Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,  
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO
- COMPRESSION/DECOMPRESSION  
704/200 SPEECH SIGNAL PROCESSING  
704/200.1 .Psychoacoustic
- 3 704/201 (0 OR, 3 XR)  
Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,  
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO
- COMPRESSION/DECOMPRESSION  
704/200 SPEECH SIGNAL PROCESSING  
704/201 .For storage or transmission
- 3 704/206 (2 OR, 1 XR)  
Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,  
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO
- COMPRESSION/DECOMPRESSION  
704/200 SPEECH SIGNAL PROCESSING  
704/201 .For storage or transmission

09831843\_CLSTITLES

704/205 ..Frequency  
704/206 ...Specialized information

3 704/224 (1 OR, 2 XR)

Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,  
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

COMPRESSION/DECOMPRESSION  
704/200 SPEECH SIGNAL PROCESSING  
704/201 .For storage or transmission  
704/224 ..Normalizing

3 704/225 (1 OR, 2 XR)

Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,  
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

COMPRESSION/DECOMPRESSION  
704/200 SPEECH SIGNAL PROCESSING  
704/201 .For storage or transmission  
704/225 ..Gain control

2 704/203 (0 OR, 2 XR)

Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,  
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

COMPRESSION/DECOMPRESSION  
704/200 SPEECH SIGNAL PROCESSING  
704/201 .For storage or transmission  
704/203 ..Transformation

2 704/209 (0 OR, 2 XR)

Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,  
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

COMPRESSION/DECOMPRESSION  
704/200 SPEECH SIGNAL PROCESSING  
704/201 .For storage or transmission  
704/205 ..Frequency  
704/206 ...Specialized information  
704/209 ....Formant

2 704/213 (1 OR, 1 XR)

Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,  
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

COMPRESSION/DECOMPRESSION  
704/200 SPEECH SIGNAL PROCESSING  
704/201 .For storage or transmission

```

                                09831843_CLSTITLES
704/211                        ..Time
704/213                        ...Zero crossing

2  704/226                      (0 OR, 2 XR)
   Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,
               LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

               COMPRESSION/DECOMPRESSION
704/200          SPEECH SIGNAL PROCESSING
704/201          .For storage or transmission
704/226          ..Noise

2  704/227                      (2 OR, 0 XR)
   Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,
               LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

               COMPRESSION/DECOMPRESSION
704/200          SPEECH SIGNAL PROCESSING
704/201          .For storage or transmission
704/226          ..Noise
704/227          ...Pretransmission

2  704/233                      (1 OR, 1 XR)
   Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,
               LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

               COMPRESSION/DECOMPRESSION
704/200          SPEECH SIGNAL PROCESSING
704/231          .Recognition
704/233          ..Detect speech in noise

2  704/264                      (0 OR, 2 XR)
   Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,
               LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

               COMPRESSION/DECOMPRESSION
704/200          SPEECH SIGNAL PROCESSING
704/258          .Synthesis
704/264          ..Excitation

```